

#### **VERNON E. SCHOLES**

#### Publications, Presentations, Abstracts:

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- Scholes, Werder, and Huggins, 1961. "Incorporation of P32 into Phosphatido-peptide Fraction of Normal and Neoplastic Mouse Epidermis." Proc. Soc. Exper. Biol. and Med., 197:740-42.
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- Scholes, 1969. "Skin Nucleic Acid Phosphorus Metabolism of DBA/1J Mice During Implanted Tumor Development and Methylcholanthrene Carcinogenesis." Cancer Research, 29:1419-16.
- Strzinek, Vela, Scholes, and Norton, 1970. "Further Studies on Liver Glyoxalase Activity in Mice Bearing Lymphosarcoma." Cancer Research, 30:334-337.
- Lindsey, Vance, Keeter, and Scholes, 1971. "Spheroplast Formation and Associated Ultrastructural Changes in a Synchronous Culture of Anacystis nidulans Treated with Lysozyme." Journal of Phycology, 7:65-71.
- Rogers, Scholes, and Schlichting, 1972. "The Ultrastructural Comparison of Euglena gracilis Gross, Bleached Euglena and Astasia longa Pringheim." J. Protozool., 19 (1):133-39.
- Brian, Gracy, Scholes, 1971. "Analysis of Acetylated and Trifluoracetylated Phenylthiohydantoin Amino Acids by Gas Chromatography." Journal of Chromatography, 63 (2):386-388.
- Brian, Gaffney, Fitzpatrick, and Scholes, 1971. "Fatty Acid Distribution of Lipids from Carcass, Liver, and Fat Bodies of the Lizard, Cremidophorus tigris, Prior to Hibernation." Comp. Biochem. Physiol., 41B:661-664.
- Holmgren, Hostetter, and Scholes, 1971. "Ultrastructural Observation of Crosswalls in the Blue-green Alga Spirulina major." Journal of Phycology, 7:309-311.
- Brian, Gracy, and Scholes, 1972. "Gas Chromatography of Cyclopropane, Fatty Acids, Methyl Esters Prepared with Methanolic, Boron Trichloride and Boron Trifluoride." Journal of Chromatography, 66(2):138-40.
- Izaddoost, Scholes, and Baghdiantz, 1972. "Introduction to the Biochemical Basis of Taxonomy." Journal of the School of Pharmacy, University of Tehran, September 23, 1972.

- Strzinek, Scholes, and Norton, 1972. "The Purification and Characterization of Liver Glyoxalase I from Normal Mice and from Mice Bearing a Lymphosarcoma."

  <u>Cancer Research</u>, 32:2359-2364.
- Baur, Walkinshaw, Halliwell, and Scholes, 1973. "Morphology of Nicotiana tabacum Cells Grown in Contact with Lunar Material." Can. J. Bot. 51:151-156.
- Larsen, Scholes, and Skinner, 1974. "Effect of 4-Chloroglutaranilic Acid on Growth and Development of Sunflower Seedling." American Journal of Botany. 61(3):290-295.
- Corley, Walkinshaw and Scholes, 1974. "Light Microscopic Observations of Tannin-Producing Cells in Callus Tissue Cultures of Pine (Pinus Elliottii)." Can J. Botany.
- Scholes, Rogers, and Moulton, 1976. "High Resolution Automated Cytological Screening." Pan American Health Organization Bulletin, August, 1976.
- Nunez, Holmgren, and Scholes, 1977. "An Electron Microscope Study of Antigen Binding in vitro by specifically Sensitized Peritoneal Exudate Cells of Guinea Pigs." <u>Tex.</u> <u>J. Sci.</u> 27(4).
- Hromas, Hutchins, Markel, and Scholes, 1981. "Flow Microfluorometric Analysis of the Effect of Ara-C on the Circadian Rhythm of Bone Marrow DNA Synthesis." <a href="https://doi.org/10.1007/j.chm.nd/">Chronobiologica</a>. 8(4):369-373.
- Hromas, Markel, and Scholes, 1981. "Flow Microfluorometric Analysis of Cell Cycle Phase Cytotoxicity of Ara-C" Research Communications in Chemistry, Pathology, and Pharmacology. 30(2)365-368.
- Gottlieb, Gottlieb, and Scholes, 1987. "Reconstitution of Immune Function in AIDS/ARC." Concepts in Immunopathology. 4:261-274.
- Scholes and Sweaney 1963. "Unclassified Mycobacteriosis-Incidence at the Missouri State Sanatorium." Proceedings of the Texas Branch ASM in Texas Rep. on Biol. and Med., 21:101-102.
- Huggins, Werder, and Scholes, 1964. "Metabolism of Radiophosphorus in Mouse Epidermis." <u>Fed.Proc.</u>, 20:153.
- Scholes, 1965. "Phosphorus Metabolism in Unclassified Mycobacteria." <u>Bacteriological</u> <u>Proceedings</u>, 65:47.
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  <u>Bacteriological Proceedings</u>, 65:44.
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- Shaw and Scholes, 1966. "Sub-Protoplast Production in Lysates of E. coli." Journal of Cell Biology, 31:104A.
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- Scholes and Hollingsworth, 1968. "Phosphatides of Atypical Mycobacteria."

  Bacterological Proceedings ASM, 68:108.
- Chapel, Strzinek, and Scholes, 1968. "The Effect of 3, 4-Benzpyrene on E. coli RNA Polymerase." Journal of Cell Biology, 39:119.
- Holmgren, Rogers, and Scholes, 1968. "Ultrastructure of the Integument of Monogenetic Trematode" (Demonstration at ASCB meeting). Journal of Cell Biology, 39:153.
- Strzinek, Vela, Norton, and Scholes, 1969. "The Effect of Animal Age and Tumor Development on Liver Glyoxalase Activity in Mice." Journal of Cell Biology, 43:141.
- Scholes, Montgomery, and Abrams, 1970. "Host-Tumor Interaction: A Histological and Chemical Study." Journal of Cell Biology, 47:182A.
- Brian and Scholes, 1971. "Cyclopropane Fatty Acids of <u>Pseudomonas aeruginosa."</u>
  Bacteriological Proceedings, 71:143.
- Rogers, Scholes, and Kimzey, 1971. "Intercellular Analysis of Cell Division by Rapid Scanning Microspectrophotometry." Presentation. Texas Society for Electron Microscopy.
- Keeter, Granatek, Scholes, and Cockerline, 1971. "Ultra-structural Studies of Barley Embryo Callus." Presentation. Texas Society for Electron Microscopy.
- Baur, Walkinshaw, Scholes, and Venketswaran, 1971. "Synthesis of Ergastic Material Pine Tissue Cultures." Demonstration, American Society for Cell Biology #676, Journal of Cell Biology, 48:342.
- Rogers, Kimzey, and Scholes, 1971. "Quantitative Distribution of Nucleo-protein of Dividing Cells as Revealed by Ultraviolet Microscopectrophotometry."

  Demonstration, American Society for Cell Biology, #689. Journal of Cell Biology, 48:346.
- Strzinek, Norton, and Scholes, 1971. "Differences in Liver Glyoxalase I from Normal and Cancerous Mice." Abstract #577. Presentation, American Society for Cell Biology. Journal of Cell Biology, 48:293.
- Larsen, Scholes, and Skinner, 1971. "Biological Effects of Some New Plant Growth Factors." Plant Physiology, 47 (Supl.):48.
- Blachley, Scholes, and Gretz, 1972. "A Carcinogenic Agent Elaborated by Liver Cells from Lymphosarcoma-Bearing Mice." Abstract #42. Presentation, American Society for Cell Biology. Journal of Cell Biology, 55:21a.
- Strzinek, Scholes, and Norton, 1972. "Studies on Glyoxalase I: Evidence for Modification in Liver of Tumor-Bearing Mice." Abstract #506. Presentation, American Society for Cell Biology. Journal of Cell Biology, 55:254a.

- Scholes, February, 1976. "Cost Analysis of Microbiology Teaching." Association for Medical School Microbiology Chairmen, Mobile, Alabama, A.S.M. News.
- Hromas, Markel, and Scholes. November, 1979. "Suppressed Lymphocyte Blastogenesis Induced by Suspected Murine Sarcoma Virus." Presentation. Oklahoma Academy of Science, Edmond, Oklahoma.
- Hromas, Markel, and Scholes, November, 1979. "Suppressed Lymphocyte Blastogenesis Induced by a Suspected Murine Sarcoma Virus." Presented poster session by invitation. International Engineering Foundation Conference on Automated Ctyology VIII, Psilomar Conference Grounds, Monterey, CA.
- Starkey, Logan, and Scholes, November 1981. "Immune Response Assayed by Flow Cytometry." Oklahoma Academy of Sciences, Enid, Oklahoma.
- Starkey, and Scholes, February 1982. "Detection of Bacterial Infection Through Flow Microflourometry." Oklahoma Academy of Sciences, Norman, Oklahoma.
- Essenberg, Cover, Grover, Hamilton, Richardson, Scholes, and Johnson. Production of 2,7-Dihydroxycadalene and Lacinilene C during the Resistance Response of Cotton to Xanthomonas malvacearum, Beltwide Cotton Prod. Mech. Conf., Las Vegas, Nevada, January 1982.
- Essenberg, Cover, Pierce, Richardson, Scholes, and Hamilton. Local Concentrations of Two Phytoalexins at Sites of Bacterial Colonies in Cotton Leaves, Am. Phytopathol. Soc., Salt Lake City, Utah, August, 1982, Phyopathology, 72, 945.
- Essenberg, Cover, Pierce, Richardson, Scholes, and Hamilton. Local Concentrations of Two Phytoalexins at Sites of Bacterial Colonies in Cotton Leaves, West Central States Biochem., Conf., Stillwater, Oklahoma, November 1982.
- Pierce, Cover, Essenberg, and Scholes. Localization of Inhibitory Compounds in Cotton Leaves and Estimation of Their concentrations by Fluorescence Microscopy, 71st Annual Meeting, Oklahoma Academay of Sciences, Chiskasha, Oklahoma, November 1982.
- Scholes, and Wildman, November 1982. "Effect of Tumors on the Immune Status of the Host. Oklahoma Academy of Science, Chickasha, Oklahoma.
- Cochrane, and Scholes, February 1983. "The Effect of Tumor Progression on B-cells and T-cell Subsets." Presented at the Mid-Winter Collegiate Academy Meeting, Oklahoma Academy of Science, Oklahoma State University, Stillwater, Oklahoma.
- Manteuffel, and Scholes, February 1983. "Blastogenic Response of Lymphocytes to Specific Tumor Antigens During Tumor Development." Presented at the Mid-Winter Collegiate Academy Meeting, Oklahoma Academy of Science, Oklahoma State University, Stillwater, Oklahoma.
- Isaac and Scholes, February 1983. "Effect of Tumor Progression on Phagocytosis."
  Presented at the Mid-Winter Collegiate Academy Meeting, Oklahoma Academy of Science, Oklahoma State University, Stillwater, Oklahoma.
- Wiet and Scholes, February 1983. "Effects of Tumors on Macrophage Migration as Tumors Progress." Presented at the Mid-Winter Collegiate Academy Meeting, Oklahoma Academy of Science, Oklahoma State University, Stillwater, Oklahoma.



Bibliography (Addendum)

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- Gottlieb, Gottlieb, and Scholes, 1987. "Reconstitution of Immune Function in AIDS/ARC." Concepts in Immunopathology, 4:261-274.
- Scholes, 1990. "Clinical Applications of Flow Cytometry." Medical Laboratory Observer, July, pp.54-58.
- Essenberg, Pierce, Cover, Hamilton, Scholes, and Richardson, 1992. "A Method for Determining Phytoalexin Concentrations in Fluorescent, Hypersensitively Necrotic Cells in Cotton Leaves."

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- Essenberg, Pierce, Hamilton, Cover, Scholes, and Richardson, 1992. "Development of Fluorescent, Hypersensitively Necrotic Cells Containing Phytoalexin Adjacent to Colonies of Xanthomonas campestris pv. malvacearum in cotton leaves." Physiological and Molecular Plant Pathology, 41:85-99.
- Pierce, Cover, Richardson, Scholes, Essenberg, 1996. "Adequacy of Cellular Phytoalexin Concentrations in Hypersensitively Responding Cotton Leaves." Physiological and Molecular Plant Pathology, 48:305-324.

# Special Symposia and Consultantships:

- Special Consultant to the United States Department of Agriculture "Incineration of Virus-Infected Animal Carcasses," 1971.
- Consultant in Microbiology Veterans Administration Hospital, Biloxi, Mississippi, 1975-76.
- Special Consultant to the Center for Disease Control, Atlanta, Georgia "Rapid Indentification of Viruses," 1975-76.
- Invited Participant, Special Symposium "Automated Cytology in the Diagnosis of Cancer" National Institutes of Health, National Cancer Institute, 1975.
- Invited Participant, International Symposium Evaluation of Clinical Laboratory Automation in the Americas, Mexico City, Mexico. Invited speaker "High Resolution Automated Cytological Screening," 1976.
- Local Arrangements Chairman Association of Medical School Microbiology Chairman Meeting, Mobile, Alabama, 1976.
- Program Committee Chairman Association of Medical School Microbiology Chairman Meeting, 1977-79.
- Invited participant Engineering Foundation Sixth Conference on Automated Cytology, Schloss Elmau, Bavaria, West Germany, 1978.
- Invited participant Engineering Foundation Conference VII on Automated Cytology, Psilomar Conference Grounds, Monterey, California, 1979.
- Invited Participant Conference on Analytical Cytology and Cytometry, Wentworth by the Sea, Portsmouth, New Hampshire, 1981.
- Invited Participant Allergy Symposium at Environmental Ecology Health Center, Dallas, Texas, 1981.
- Invited Participant Allergy Symposium at Environment Ecology Health Center, Dallas, Texas, 1981.
- Invited Participant -- Seminar on Flow Cytometry at NASA, Houston, Texas, 1982.
- Invited Participant Conference on Analytical Cytology and Cytometry Schloss Elmau, Bavaria, West Germany, 1982.

### Director of M.S. Theses:

- Earl Meador, 1966 "Studies of Delayed Hypersensitivity Reactions in Mice"
- James Carnes, 1966 "Phosphorus Metabolism in Atypical Mycobacteria"
- James Shaw, 1966 "Electron Microscopy of Vesicles Present in Bacterial Lysates of Escherichia coli"

- J. Frederick Chapel, 1967 "The In Vitro Interaction of 3-Methylcholanthrene with Deoxyribonucleic Acid"
- Russell Hollingsworth, 1968 "Phospholipids of Atypical Mycobacteria"
- Bruce Gunn, 1968 "Effects of the Soil Conditioner 'Superbio' upon the Cellulose Decomposing Bacteria and the Crop Yield of Soil"
- Joe Abrams, 1970 "Ultrastructural Changes of Tumor Implants in Mice"
- Robert Pardue, 1972 "Electron Microscopy of Lymphocytes from Lymphosarcoma Bearing Mice"
- Jon D. Blackley, 1972 "A Carcinogenic Agent Elaborated by Liver Cells from Lymphosarcoma Bearing Mice"
- Rob Hromas, 1979 "Immunosuppression Induced by a Murine RNA Tumor Virus Extracted from a Lymphosarcoma"
- Steve Wildman, 1982 "Effect of a Lymphosarcoma on the Immune Status of the Host"

## Director of Ph.D. Dissertations:

- H. Frederick Chapel, 1969 "In vivo DNA Modifications by Polycyclic Hydrocarbons"
- Paul Holmgren, 1969 "The Use of P<sup>32</sup> and Autoradiography in an Ultrastructural Study of Phosphorus Incorporation in Tissue of the Tumor-bearing Host"
- Tom Rogers, 1979 "Light and Electron Microscope Studies on the Chemotherapeutic Effect of a Combination of Dimethyl Sulfoxide and Hematoxylin on a Transplantable Lymphosarcoma"
- Robert Strzinek, 1970 "A Characterization of the Glyoxalase Enzyme from Normal and Tumor Systems"
- William Nunez, 1970 "A Comparative Study of Passive Transfer Mechanisms of Tuberculin and Chemical contact Delayed Hypersensitiveness in the Guinea Pig"
- Stephen P. Larsen, 1972 "Effect of 4-Chloroglutaranilic Acid on Growth and Development of Sunflower Seedlings"
- Buford L. Brian, 1972 "Lipids and Phospholipase Activity of Vibrio Cholerae"
- James E. Carnes, 1972 "In Vivo and In Vitro Transformation of Mouse Tissues from a Murine Lymphosar coma"
- Jerri Lindsey, 1972 "A Study of Normal, Pre-Tumor, and Tumor Cells from Mice Bearing Lymphosarcoma"
- Terri Lindsey, 1972 "Effect of Tumor Tissue on Mouse Serum Proteins"

# Director of Post-Doctoral Work

Tom D. Rogers, Ph.D. NASA-MSC. Early Detection of Disease

1969-72

Paul S. Baur, Jr., Ph.D. NASA-MSC. Effect of Lunar Material on the Ultastructure of Plant Cells.

Thomas Croley, Ph.D. NASA-MSC. Effect of Lunar Material on the Ultrastructure of Plant Cells. 1971-72

Daiel Markel, Ph.D. ORU. Automated Cytometry

1979-80